P01/09 PK

CRF Errors Corrected by th STIC Syst ms Branch

Serial Number: 09/700,130 ENTERED

CRF Processing Dat : 1/27/2002
Edited by:
Verified by: (STIC staff)

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically:

  _____

- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:

  _____

- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

  _____

- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

  _____

- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included:

  _____

- ☐ Deleted extra, invalid, headings used by an applicant, specifically:

  _____

- ☑ Deleted: ☑ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____.
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically:

  _____

- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically:

  _____

- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted ***ending*** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other:

  _____

  _____

  _____

  _____

***Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.**

3/1/95

PCT09

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/700,130

DATE: 01/27/2002
TIME: 19:45:10

Input Set : N:\jumbos\700130.txt
Output Set: N:\CRF3\01272002\I700130.raw

p.5

<110> APPLICANT: Gerdes, Kenn
Mikkelson, Marie (FKA Gotfredsen)
Gronlund, Hugo
Pedersen, Kim
Kristoffersen, Peter
<120> TITLE OF INVENTION: CYTOTOXIN-BASED BIOLOGICAL CONTAINMENT
<130> FILE REFERENCE: PLOUG1.001APC
<140> CURRENT APPLICATION NUMBER: US 09/700,130
<141> CURRENT FILING DATE: 2000-11-07
<150> PRIOR APPLICATION NUMBER: PCT/DK99/00258
<151> PRIOR FILING DATE: 1999-05-07
<150> PRIOR APPLICATION NUMBER: DK 0627/98
<151> PRIOR FILING DATE: 1998-05-07
<150> PRIOR APPLICATION NUMBER: US 60/085,067
<151> PRIOR FILING DATE: 1998-05-12
<160> NUMBER OF SEQ ID NOS: 59
<170> SOFTWARE: FastSEQ for Windows Version 4.0
<210> SEQ ID NO: 1
<211> LENGTH: 51
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: primer relE1B was used for the amplification of relEK-12 by PCR on pBD2430
<400> SEQUENCE: 1
ccccggatcc ataaggagtt ttataaatgg cgtattttct ggattttgac g 51
<210> SEQ ID NO: 2
<211> LENGTH: 38
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: primer relE1B was used for the amplification of relEK-12 by PCR on pBD2430
<400> SEQUENCE: 2
ccccccctcga ggtcgactca gagaatgcgt ttgaccgc 38
<210> SEQ ID NO: 3
<211> LENGTH: 28
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: primer RelB-p307/1 was used for the generation of a PCR-fragment from pNZ945
<400> SEQUENCE: 3

RAW SEQUENCE LISTING DATE: 01/27/2002
PATENT APPLICATION: US/09/700,130 TIME: 19:45:10

Input Set : N:\jumbos\700130.txt
Output Set: N:\CRF3\01272002\I700130.raw

69 cccccggatc ccagtcttga aaggtggc 28
71 <210> SEQ ID NO: 4
72 <211> LENGTH: 29
73 <212> TYPE: DNA
74 <213> ORGANISM: Artificial Sequence
76 <220> FEATURE:
77 <223> OTHER INFORMATION: primer RelB-p307/2 was used for the generation of
78 a PCR-fragment from pNZ945
82 <400> SEQUENCE: 4
83 cccccgaatt ctcataggta tttatccag 29
85 <210> SEQ ID NO: 5
86 <211> LENGTH: 27
87 <212> TYPE: DNA
88 <213> ORGANISM: Artificial Sequence
90 <220> FEATURE:
91 <223> OTHER INFORMATION: primer relE-p307/3 was used to PCR-amplifiy the
92 gene relEP307 from pNZ945
96 <400> SEQUENCE: 5
97 ccccggatcc agatctggat aaatacc 27
99 <210> SEQ ID NO: 6
100 <211> LENGTH: 32
101 <212> TYPE: DNA
102 <213> ORGANISM: Artificial Sequence
104 <220> FEATURE:
105 <223> OTHER INFORMATION: primer relE-p307/2 was used to PCR-amplify the
106 gene relEP307 from pNZ945
108 <400> SEQUENCE: 6
109 cccccgaatt cgtaactttc tgtgtttatt gc 32
111 <210> SEQ ID NO: 7
112 <211> LENGTH: 28
113 <212> TYPE: DNA
114 <213> ORGANISM: Artificial Sequence
116 <220> FEATURE:
117 <223> OTHER INFORMATION: primer relE-p307/4 was used for the generation of
118 a DNA fragment encoding relEP307 by PCR
122 <400> SEQUENCE: 7
123 cccccgagct cagatctgga taaatacc 28
125 <210> SEQ ID NO: 8
126 <211> LENGTH: 32
127 <212> TYPE: DNA
128 <213> ORGANISM: Artificial Sequence
130 <220> FEATURE:
131 <223> OTHER INFORMATION: Primer relE-P307/5 was used for the generation of
132 a DNA fragment encoding relEP307 by PCR
134 <400> SEQUENCE: 8
135 cccccgcatg cgtaactttc tgtgtttatt gc 32
137 <210> SEQ ID NO: 9
138 <211> LENGTH: 1444
139 <212> TYPE: DNA

RAW SEQUENCE LISTING DATE: 01/27/2002
PATENT APPLICATION: US/09/700,130 TIME: 19:45:10

Input Set : N:\jumbos\700130.txt
Output Set: N:\CRF3\01272002\I700130.raw

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    140 <213> ORGANISM: E. coli K-12
    142 <220> FEATURE:
    143 <221> NAME/KEY: misc_feature
    144 <222> LOCATION: (1)...(1444)
    145 <223> OTHER INFORMATION: n = A,T,C or G
    147 <400> SEQUENCE: 9
    148 cttaatttca ggccccatcg gatcacacat ggagagtttt tatgaataac cccgtctgtc 60
    149 ttgatgactg gttgattggc tttaaaagct tgttgacagg ggtaaacgtt cggcaataat 120
    150 tttctgccgc atgcgggtgt tgcataaaac gtgttacgtt cctttatcga caggtcaggt 180
    151 caccgctcac ccgccgacga gaaagcaaca ctgacatgct aaagcaaaaa atagatgaat 240
    152 aagttgagtt gtgcatatgt agcctgaccg tcacaaagta tatggtgtct gtaccagtaa 300
    153 gatgatggcc ggactcttta aaaacgagct gacctgcaca atacaggatg gacttagcaa 360
    154 tggctgctcc tggcacaaag cggacagtga tcaccgttct tacgactact ttctgacttc 420
W--> 155 cttcgtgact tgccctaagc atgttgtagt rbmrnarbst artgcgatac ttgtaatgac 480
    156 atttgtaatt acaagaggtg taagacatgg gtargcatta acctgcgtat tgacgatgaa 540
    157 cttaaagcgc gttcttacgc cgcgcttgaa aaaatgggtg taactccttc tgaagcgctt 600
    158 cgtctcatgc tcgagtatat cgctgacaat gaacgcttgc cgttcaaaca gacactcctg 660
W--> 159 agtgatgaag atgctgaact tgtggagata gtgaaagaac ggcttcgtaa tcctndrbst 720
    160 artraagcca gtacgtgtga cgctggatga actctgatgg cgtattttct ggattttgac 780
    161 gagcgggcac taaaggaatg gcgaaagctg ggctcgacgg tacgtgaaca gttgaaaaag 840
    162 aagctggttg aagtacttga gtcaccccgg attgaagcaa acaagctccg tggtatgcct 900
    163 gattgttaca agattaagct ccggtcttca ggctatcgcc ttgtatacca ggttatagac 960
    164 gagaaagttg tcgttttcgt gatttctgtt gggaaaagag aacgctcgga agtatatagc 1020
W--> 165 gaggndrcgg tcaaacgcat tctctgaacc aaagcatgac atctctgttt cgcaccgsta 1080
    166 rthkcraagg tgacacttct gctttgcgtt gacaggagaa gcaggctatg aagcagcaaa 1140
    167 aggcgatgtt aatcgccctg atcgtcatct gtttaaccgt catagtgacg gcactggtaa 1200
W--> 168 cgaggaaaga cctctgcgag gtacgaatcc gaaccgndhk caccagacgg aggtcgctgt 1260
    169 cttcacagct tacgaacctg aggagtaaga gacccggcgg gggagaaatc cctcgccacc 1320
    170 tctgatgtgg caggcatcct caacgcaccc gcacttaacc cgcttcggcg ggtttttgtt 1380
    171 tttattttca arttcgcgtt tgaagttctg gacggtgccg gaatagaatc aaaaatactt 1440
    172 aagt                                                            1444
    174 <210> SEQ ID NO: 10
    175 <211> LENGTH: 88
    176 <212> TYPE: PRT
    177 <213> ORGANISM: Methanococcus jannaschhii #2
    179 <220> FEATURE:
    180 <223> OTHER INFORMATION: protein relE-Mj2
    182 <400> SEQUENCE: 10
    183 Met Lys Val Leu Phe Ala Lys Thr Phe Val Lys Asp Leu Lys His Val
    184  1               5                  10                  15
    185 Pro Gly His Ile Arg Lys Arg Ile Lys Leu Ile Ile Glu Glu Cys Gln
    186             20                  25                  30
    187 Asn Ser Asn Ser Leu Asn Asp Leu Lys Leu Asp Ile Lys Lys Ile Lys
    188         35                  40                  45
    189 Gly Tyr His Asn Tyr Tyr Arg Ile Arg Val Gly Asn Tyr Arg Ile Gly
    190     50                  55                  60
    191 Ile Glu Val Asn Gly Asp Thr Ile Ile Phe Arg Arg Val Leu His Arg
    192 65                  70                  75                  80
    193 Lys Ser Ile Tyr Asp Tyr Phe Pro
```

RAW SEQUENCE LISTING DATE: 01/27/2002
PATENT APPLICATION: US/09/700,130 TIME: 19:45:10

Input Set : N:\jumbos\700130.txt
Output Set: N:\CRF3\01272002\I700130.raw

```
194                 85
197 <210> SEQ ID NO: 11
198 <211> LENGTH: 91
199 <212> TYPE: PRT
200 <213> ORGANISM: Methanococcus jannaschhii #3
202 <220> FEATURE:
203 <223> OTHER INFORMATION: protein relE-Mj3
205 <400> SEQUENCE: 11
206 Met Lys Gln Trp Lys Tyr Leu Leu Lys Lys Ser Phe Ile Lys Asp Leu
207  1               5                  10                  15
208 Lys Glu Leu Pro Lys Asn Ile Gln Glu Lys Ile Lys Lys Leu Val Phe
209             20                  25                  30
210 Glu Glu Ile Pro Asn Lys Asn Asn Pro Pro Glu Ile Pro Asn Val Lys
211         35                  40                  45
212 Lys Leu Lys Gly Ala Asp Ser Tyr Tyr Arg Ile Arg Val Gly Asp Tyr
213     50                  55                  60
214 Arg Ile Gly Phe Lys Tyr Glu Asn Gly Lys Ile Val Phe Tyr Arg Val
215 65                  70                  75                  80
216 Leu His Arg Lys Gln Ile Tyr Lys Arg Phe Pro
217                 85                  90
220 <210> SEQ ID NO: 12
221 <211> LENGTH: 87
222 <212> TYPE: PRT
223 <213> ORGANISM: Archaeoglobus fulgidus #1
225 <220> FEATURE:
226 <223> OTHER INFORMATION: protein relE-Af1
228 <400> SEQUENCE: 12
229 Met Phe Arg Val Val Val His Arg Lys Ala Thr Gln Glu Leu Lys Arg
230  1               5                  10                  15
231 Leu Lys Lys Ala His Leu Lys Lys Phe Gly Val Leu Leu Glu Thr Leu
232             20                  25                  30
233 Lys Thr Asp Pro Ile Pro Trp Lys Arg Phe Asp Val Lys Lys Ile Glu
234         35                  40                  45
235 Gly Glu Glu Asn Thr Tyr Arg Ile Arg Ile Gly Asp Phe Arg Val Ile
236     50                  55                  60
237 Tyr Phe Leu Asp Lys Pro Thr Lys Thr Val His Ile Leu Lys Val Glu
238 65                  70                  75                  80
239 Arg Arg Gly Lys Val Tyr Asp
240                 85
243 <210> SEQ ID NO: 13
244 <211> LENGTH: 90
245 <212> TYPE: PRT
246 <213> ORGANISM: Methanococcus jannaschhii #1
248 <220> FEATURE:
249 <223> OTHER INFORMATION: protein relE-Mj1
251 <400> SEQUENCE: 13
252 Met Lys Phe Asn Val Glu Ile His Lys Arg Val Leu Lys Asp Leu Lys
253  1               5                  10                  15
254 Asp Leu Pro Pro Ser Asn Leu Lys Lys Phe Lys Glu Leu Ile Glu Thr
```

RAW SEQUENCE LISTING DATE: 01/27/2002
PATENT APPLICATION: US/09/700,130 TIME: 19:45:10

Input Set : N:\jumbos\700130.txt
Output Set: N:\CRF3\01272002\I700130.raw

```
255             20                  25                  30
256 Leu Lys Thr Asn Pro Ile Pro Lys Glu Lys Phe Asp Ile Lys Arg Leu
257         35                  40                  45
258 Lys Gly Ser Asp Glu Val Tyr Arg Val Arg Ile Gly Lys Phe Arg Val
259     50                  55                  60
260 Gln Tyr Val Val Leu Trp Asp Asp Arg Ile Ile Ile Ile Arg Lys Ile
261 65                  70                  75                  80
262 Ser Arg Arg Glu Gly Ala Tyr Lys Asn Pro
263                 85                  90
266 <210> SEQ ID NO: 14
267 <211> LENGTH: 74
268 <212> TYPE: PRT
269 <213> ORGANISM: Bacillus thuringiensis
271 <220> FEATURE:
272 <223> OTHER INFORMATION: protein relE-Bt
274 <400> SEQUENCE: 14
275 Met Lys Phe Ile Ala Lys Gln Glu Lys Gly Ile Gln Lys Arg Ile Ala
276  1               5                  10                  15
277 Glu Gly Leu Lys Gly Leu Leu Lys Ile Pro Pro Glu Gly Asp Ile Lys
278             20                  25                  30
279 Ser Met Lys Gly Tyr Thr Glu Leu Tyr Arg Leu Arg Ile Gly Thr Phe
280         35                  40                  45
281 Arg Ile Leu Phe Glu Ile Asn His Asp Glu Lys Val Ile Tyr Ile Gln
282     50                  55                  60
283 Ala Ile Gly Asn Arg Gly Asp Ile Tyr Lys
284 65                  70
287 <210> SEQ ID NO: 15
288 <211> LENGTH: 95
289 <212> TYPE: PRT
290 <213> ORGANISM: E. coli plasmid P307
292 <220> FEATURE:
293 <223> OTHER INFORMATION: protein relE-P307
295 <400> SEQUENCE: 15
296 Met Arg Tyr Gln Val Lys Phe Arg Glu Asp Ala Leu Lys Glu Trp Gln
297  1               5                  10                  15
298 Lys Leu Asp Lys Ala Ile Gln Gln Gln Phe Ala Lys Lys Leu Lys Lys
299             20                  25                  30
300 Cys Cys Asp Asn Pro His Ile Pro Ser Ala Lys Leu Arg Gly Ile Lys
301         35                  40                  45
302 Asp Cys Tyr Lys Ile Lys Leu Arg Ala Ser Gly Phe Arg Leu Val Tyr
303     50                  55                  60
304 Gln Val Ile Asp Glu Gln Leu Ile Ile Ala Val Val Ala Val Gly Lys
305 65                  70                  75                  80
306 Arg Glu Arg Ser Asp Val Tyr Asn Leu Ala Ser Glu Arg Met Arg
307                 85                  90                  95
310 <210> SEQ ID NO: 16
311 <211> LENGTH: 82
312 <212> TYPE: PRT
313 <213> ORGANISM: E. coli K-12
```

Use of n and/or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY DATE: 01/27/2002
PATENT APPLICATION: US/09/700,130 TIME: 19:45:11

Input Set : N:\jumbos\700130.txt
Output Set: N:\CRF3\01272002\I700130.raw

L:155 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:967 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:44
L:967 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:44
L:967 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44
L:972 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:44
L:972 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:44
L:972 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44
L:976 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:44
L:976 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:44
L:976 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44
L:997 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:45
L:997 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:45
L:997 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:1003 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:45
L:1003 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:45
L:1003 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:1008 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:45
L:1008 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:45
L:1008 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:1031 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:46
L:1031 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:46
L:1031 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46
L:1035 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:46
L:1035 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:46
L:1035 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46